

Massachusetts Drug Supply Data Stream (MADDS) New Bedford Report 2021

Drug Supply Update: New Bedford, MA

67 samples tested from New Bedford in 2021; 63 sent for advanced testing



From January to December 2021, 708 drug samples were tested by MADDS, 555 (78.4%) of which were from Massachusetts and had complete on-site and off-site laboratory testing results available for this report. In New Bedford, 67 drug samples were tested, with 63 (94.0%) sent for complete, advanced testing. The main drug compounds detected in samples from New Bedford were fentanyl (58.7%), cocaine (34.9%), and xylazine (17.5%). Compared to the rest of the state, these patterns were similar, with the exception that the analog 4-fluorofentanyl is less prominent in New Bedford fentanyl samples. Additionally, fewer heroin/fentanyl samples contained the fentanyl synthesis precursors 4-ANPP (79.3%), and phenethyl 4-ANPP (37.9%) compared to the rest of the state. These two compounds may indicate poorly synthesized and purified fentanyl, which could result in a weaker fentanyl supply. The presence of caffeine (10.8%) and xylazine (29.7%), a veterinary sedative, were increasingly common active cuts in heroin/fentanyl samples, and phenacetin (35.3%) was a common active cut in cocaine samples. The most

frequently detected inactive components included lactose (25.4%), mannitol (19.0%),and cellulose (9.5%). These numbers show that mannitol is more common and cellulose less common than reporting from 2020 but are consistent with much of the rest of Additional data the state. regarding the substances involved during adverse events are available upon request.

Primary chemical contents for 61 powder or pill drug samples sent for complete advanced testing from New Bedford are shown in Figure 1.



Components of the Drug Supply

The street drug supply is unpredictable, and drugs may contain more components than what is expected. In addition to the primary drug or drugs, additives, known as cuts, may be added. Which cuts are used and the ratios in which they are used vary by drug and may affect the use experience. As can be seen in Figure 2, most samples tested by MADDS in 2021 contained some kind of cut.



Figure 2

Active Substances

Any component of a drug that affects the use experience is an active substance. The substance could be what a drug is intended to be or sold as, an additive that was cut into a drug, or any substance that is present as a result of cross-contamination. Figure 3 shows all active substances that were detected in MADDS samples in 2021. The pie chart shows that 4-fluorofentanyl was the most frequently detected fentanyl analogue in 2021.



Figure 3

Active Cuts

Substances added to drugs that affect the use experience but are not the intended drug or what a drug is sold as are called active cuts. These additives may intensify, diminish, lengthen, or shorten the effect of a drug. Figure 4 breaks down the most common active cuts detected in MADDS samples in 2021. Fentanyl as an active cut is reported separately, in Figure 5.







Figure 5

Active cut: Fentanyl

Fentanyl and its analogues remain the most common active cuts in the drug supply in Massachusetts. Figure 5 shows the presence of fentanyl in other samples tested by MADDS.

The combination of opioids with stimulants increases the risk for opioid overdose and other health concerns. As fentanyl and other opioids have been detected in many other drugs, including stimulants and counterfeit pills, access to naloxone and education around naloxone use is extremely important, even for those who do not use opioids.



Figure 6

Inactive Cuts

Substances that do not affect the use experience are called inactive cuts. These may be added to bulk up the amount of a drug and dilute a drug's concentration. Effects of drugs with inactive cuts may therefore be less intense than the same amount of a more concentrated version of the drug.

Although inactive cuts are less likely to have serious adverse health effects than active cuts, they may still present some risk. Figure 6 shows the most common inactive cuts detected by MADDS in drug samples from 2021.

Berkshire County Boston Brockton Fall River Gloucester Greenfield for their important work and their su	Lawrence Lynn New Bedford Northampton Quincy pport of this project.
For more information on MADDS of Massachusetts, <u>click here</u> or	or drug checking in scan below.